

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (previously presented) An electronic assembly, comprising a printed circuit substrate including a retentive through hole, a plurality of lands, and an electrical connector, the electrical connector comprising:

a housing;

a plurality of solder masses extending from a surface of the housing for electrically connecting the electrical connector to the lands of the circuit substrate; and

a retentive structure extending from the surface of the housing, spaced apart from the plurality of solder masses, and positioned within the through hole, the retentive structure comprising a base material and a plating material disposed over at least a portion of the base material, the retentive structure having a cross-sectional area smaller than an area of the through hole so that a clearance exists between the retentive structure and a periphery of the through hole;

wherein at least some of the plating material separates from the base material at a reflow temperature of the plurality of solder masses and combines with a solder composition within the through hole so that the solder composition and the plating material, upon cooling, form a bond between the printed circuit substrate and the retentive structure.

2. (previously presented) The electronic assembly of claim 1, wherein the reflow temperature is about 180 degrees Celsius.

3. (previously presented) The electronic assembly of claim 1, wherein the plating material is selected from the group comprising gold, palladium, platinum, silver, rhodium, iridium, osmium, ruthenium, and rhenium.
4. (previously presented) The electronic assembly of claim 1, wherein the plating material comprises gold.
5. (previously presented) The electronic assembly of claim 1, wherein the plating material comprises palladium.
6. (previously presented) The electronic assembly of claim 1, wherein at least about 40% by volume of the plating material separates from the base material.
7. (previously presented) The electronic assembly of claim 1, wherein at least about 60% by volume of the plating material separates from the base material.
8. (previously presented) An electronic assembly, comprising a printed circuit substrate including a retentive through hole, a plurality of lands, and an electrical connector, the electrical connector comprising:
 - a housing;
 - a plurality of solder masses extending from a surface of the housing for electrically connecting the electrical connector to a circuit substrate; and

a retentive structure extending from the surface of the housing, spaced apart from the plurality of solder masses, and positioned within the through hole, the retentive structure having a cross-sectional area smaller than an area of the through hole so that a clearance exists between the retentive structure and a periphery of the through hole, and being made with a material that combines with a solder composition within the through hole and enables continued affixation of the electrical connector to a circuit substrate at temperatures sufficient to initiate reflow of the plurality of solder masses.

9. (previously presented) An electronic assembly, comprising a printed circuit substrate including a retentive through hole, a plurality of lands, and an electrical connector, the electrical connector comprising:

a housing;

a retentive structure extending from a surface of the housing and being received by a through hole formed in the substrate for effecting a non-electrical connection with a circuit substrate, the retentive structure made with a material that alters a physical property of a solder composition in contact with the retentive structure within the through hole at a reflow temperature of such a solder composition.

10. (previously presented) The electronic assembly of claim 9, wherein the physical property is a melting temperature.

11. (previously presented) The electronic assembly of claim 10, wherein the melting temperature is increased by at least about 10 degrees Celsius.

12. (previously presented) The electronic assembly of claim 9, wherein the retentive structure is made with a base material and a plating material disposed over at least a portion of the base material.

13. (previously presented) The electronic assembly of claim 12, wherein the plating material is selected from the group comprising gold, palladium, platinum, silver, rhodium, iridium, osmium, ruthenium, and rhenium.

14. (previously presented) The electronic assembly of claim 9, wherein the plating material includes gold.

15. (previously presented) The electronic assembly of claim 9, wherein the plating material includes palladium.

16. (previously presented) The electronic assembly of claim 9, further comprising a plurality of solder masses extending from the surface of the housing for effecting an electrical connection with a circuit substrate.

17. (previously presented) An electrical connector, comprising:
a housing;
solder masses extending from a surface of the housing for electrically connecting the electrical connector to a circuit substrate; and

a retentive structure extending from the surface of the housing, spaced apart from the plurality of solder masses, and positioned within the through hole, the retentive structure comprising a material that combines with a solder composition within the through hole such that after initial affixation of the solder masses with the circuit substrate, affixation at the solder masses is compromised, due to an elevated temperature, prior to affixation at the retentive structure.

18. (canceled)

19. (previously presented) The electronic assembly of claim 1, further comprising a second electrical connector affixed to an opposite side of the printed circuit substrate than the electrical connector.